

SCHEDULE I

Minimum requirements for design documentation for Class I and Class 10 buildings.

(Applicable to Permit Building Work or Notifiable Building Work)

Note: Drawings may be combined with another drawing or omitted if the information is not applicable to the project. The information may also be provided within a schedule, specification or by another consultant.

To be read in conjunction with the National Construction Code and the Explanatory Information at the end of this schedule.

I. All Projects

Item applies to Class 10:

Drawing Title Block	Y
Title block on every drawing to contain:	
Licensed designer (usually name, licence number, address and contact number)	Y
Drawing number (including revision numbers and date) and number of drawings in set	Y
Project address	Y
Client name	Y

Cover Page	
Designer's name and licence number	Y
Project address	Y
Owner or client name	Y
Land title reference number (certificate folio and volume)	Y
Index of all drawings, specifications, schedules and attachments	Y
Total floor areas of each level and decks	Y
Design wind speed	Y
Soil classification <i>Note: A soil classification for Class 10 buildings may not be required for simplistic or small structures or where pre-engineered designs contain a range of soil designs. For large Class 10 buildings the designer must consider whether a soil classification is required.</i>	
Climate zone <i>Note: Class 10 if containing a conditioned space.</i>	
Designated Bushfire-Prone Area BAL rating (Bushfire Attack Level)	Y
Alpine area (900m above AHD)	Y
Corrosion environment considerations	

Item applies to Class 10:

Other known site hazards (flooding, landslip, dispersive soils, saline soils, sand dunes, mine subsidence, landfill etc.)	
Site Plan (1:200) <i>Note: Site plans may be drawn at different scales where necessary.</i>	Y
The title boundaries, dimensions and directions of the land, including the north point, building line (distance between front of the building and front boundary line). <i>Note: "Standalone" Class 10 buildings (the only building on the allotment), need not be drawn to scale, provided the detailed site plan contains dimensions, set back etc. The sketch or other document must contain the basic information requirements in this part (boundaries, north point, easements etc.) where they can be described.</i>	
The position and dimensions of any drains or service easements on the land	Y
The name of any street or way onto which the land abuts	
The position and dimensions on the allotment of the proposed building or building work <i>Note: A "building" includes part of a building and non-habitable structures such as retaining walls, swimming pools, masts etc.</i>	Y
Driveways, parking areas and kerb crossovers <i>Note: Consideration must be given to surface levels from the road access to the allotment and within the allotment where driveways, parking areas and crossovers are proposed.</i> <i>Note: Plans to consider stormwater flow over driveways, parking areas and crossovers.</i>	
Finished floor and site levels relative to site datum	
The relationship of the proposed building or building work to the boundaries of the land	Y
The position of any buildings on adjoining properties within 3m of the boundary of the land <i>Note: The site plan must indicate any existing buildings, structures, retaining walls, tree removal or the like within 3 metres of the boundary of the land. Where this occurs, further designs may be required detailing any measures of "protection works" under section 121 of the Act. An owner who commissions building work that requires protection work must notify the relevant adjacent land owner using Form 6 (Building and Protection Work Notice).</i>	Y
Detailed contours of the land at 0.5m intervals over the building site referenced to a project site datum for all new Class 1 buildings <i>Note: Contours must be detailed over the building envelope of class 1 additions if they are available from recent drawings or plans containing contour information.</i> <i>Note: For Class 1 additions or Class 10 buildings (where the existing ground level over the buildings footprint of the new work exceeds 1m deep) drawing plans must contain sufficient detail regarding dimensions, depths, bulk excavations, cuts, batters and any required methods of drainage control.</i>	
Earthworks (excavations or fill levels relative to the site datum and compaction details) and associated soil and water management strategies	
The position of any existing building, structure or trees or recently removed building or structures on the land and the purpose for which the building or structures is, or was used <i>Note: Abnormal moisture conditions in soil may arise on sites where existing trees or buildings have been removed, dams or in ground swimming pools or tanks filled prior to construction.</i>	

Item applies to Class 10:

<i>Consideration must be given to the correct detailing of site drainage where abnormal site conditions occur.</i>	
<i>Note: The location of existing building is required where Bushfire protection measures apply.</i>	
Surface and sub-surface site drainage including location of sewer drains, on-site wastewater management systems including their land application area	Y
Levels of overflow relief gully (ORG) rim relative to the lowest sanitary plumbing fixture outlet and the surrounding finished surface level	Y
<i>Note: This part also applies to Class 10 buildings that contain sanitary plumbing fixtures.</i>	
Levels of inverts to existing and proposed drainage services at point of connection to approved disposal system	Y
<i>Note: Include roof stormwater drainage systems to Class 10 buildings (where applicable)</i>	

Floor Plan (1:100)	Y
Dimensions (including room dimensions)	Y
Room uses	Y
Floor levels	Y
Facilities	Y
Windows and openings	Y
Location and specification of solid fuel, oil or gas heating appliances	Y
Garage doors	Y
Identification of existing structure	Y
Identify demolition, any asbestos containing material, heritage considerations	Y
<i>Note: "Protection Works" may need to be considered when undertaking demolition works. See explanatory box requirements under "Detailed site Plan".</i>	
Safe movement and access details (direction of stairs and ramps)	Y
Fire separation requirements	Y

Slab Plan / Floor Framing Plan (1:100) and Details (1:20)	Y
Dimensioned plan and construction details of footings including penetrations, step down details and placement of reinforcement including cover	Y
Nominated founding depth and description of founding material	Y
Dimensioned plan and construction details of slabs including levels, falls or gradients	Y
Slab preparation including materials, thicknesses, compaction requirements, vapour barrier specifications and installation details	Y
Construction details of penetrations, step downs in beams, set downs in slabs and placement details of reinforcement including cover	Y
Sub-floor vents (location and size per metre)	Y

Item applies to Class 10:

<i>Note: Drawings must detail location of sub floor vents required for dead air spaces and cross flow air.</i>	
Sub-floor bracing (masonry shear walls)	Y
Specify dimensions of engaged and isolated piers	Y
Retaining walls, dimensioned and showing position of drainage, founding levels and heights (see Project Specific Information)	Y
Concrete strength, finishing and curing requirements	Y
Specifications and installation details of proprietary and other systems	Y
Show minimum clearances to ground level of flooring system members	Y
Framing drawings or schedules to indicate each structural member, dimensions, orientation, material, grade and size, spacing and span	Y
Joint, support and bearing details	Y

Roof Plan (1:100)	Y
Dimensions	Y
Roof sheeting or tile specification including: <ul style="list-style-type: none"> • Roof pitch • Batten spacing • Fixing requirements • Flashing details • Roof drainage 	Y
Roof lights	Y
Roof ventilators	Y
Eaves and overhang information	Y
Show location of roof mounted solar panels, hot water service or air conditioners	Y

Roof Framing / Bracing Plan (1:100)	Y
Indicate details and type of supporting framework, load bearing and non-load bearing parts, lintels, beams, eaves details, roof pitch, ceiling height, roof shape or angle	Y
Framing drawings or schedules to indicate each structural member, dimensions, orientation, material, grade and size, spacing and span	Y
Joint, support and bearing details	Y
Bracing, tie downs and fixings	Y
Roof pitch, eave / overhang details	Y
Show location of roof mounted solar panels, hot water service or air conditioners	Y
Fire rating construction details	Y

<p>Pre-Assembled Roof Trusses (timber or steel)</p> <p><i>Note: Factory manufactured “roof trusses” must be designed in accordance with Part 3.4.0.2 of the Building Code of Australia (ABCB protocol for structural software: including geometric design limitations) where the design is in accordance with AS1720.1 and their manufacture and use complies with the relevant Australian/New Zealand Standards.</i></p> <p><i>Note: As a minimum drawings or specifications must include: ceiling levels (raised, truncated, sloping or flat), roof pitch or angle of roof, truss spacing and layout, skillion roof height at lowest eaves point (as applicable), any boxed gutters or parapets, extent of truss roof system and eaves/gable overhang. Pre-assembled trusses handled and braced in accordance with recommendations contained in AS4440.</i></p> <p><i>Note: Designs may need to detail additional structural work to support imposed loads from pre-assembled roof trusses or products, such as floor slab thickenings, additional pad or strip footings within the footprint of the external walls, special connections, tie downs, lateral restraint and the like.</i></p> <p><i>Note: Where pre-assembled roof trusses are used, drawings or specifications must contain sufficient information to ensure that any point loads imposed by the pre-assembled roof trusses on any supporting framework (lintels, structural framework and the like) are adequately designed to support the loads from the roof framework, coverings and live loads.</i></p>	<p>Y</p>
<p>Other Engineered designed products (beams, girders and the like) shall be noted on drawing as being “engineered designed” to a manufacturer’s standard (as applicable)</p> <p><i>Note: Glue-laminated timber members, I-Beams, and the like must be noted on the drawings to be installed in accordance with current manufacturers printed design manuals (as selected).</i></p>	<p>Y</p>
<p>Drainage Plan (1:100)</p> <p>(Information may be shown on Site Plan or Floor Plan if legible)</p>	<p>Y</p>
<p>Documentation in accordance with Schedule 2 of the Director’s Specified List</p>	<p>Y</p>
<p>Reflected Ceiling Plan (1:100)</p> <p>Indicating ceiling penetrations, skylights, and exhausts fans (for conditioned spaces)</p> <p><i>Note: The plan is to indicate design of all light fittings (watts per fitting, whether ceiling mounted or downlights or both, lighting control per circuit - dimmers, timers, movement sensors and on/off switches). Where penetrations formed in insulated ceilings, any adjustment to minimum R-value for “ceiling insulation” to be made in accordance with BCA table 3.12.1.1b.</i></p>	
<p>Room heights</p>	
<p>Elevations (1:100)</p>	<p>Y</p>
<p>All elevations should be drawn</p>	<p>Y</p>
<p>Position of all windows and doors</p>	<p>Y</p>
<p>Ceiling heights and floor levels</p>	<p>Y</p>
<p>Differentiate wall and roof cladding types</p>	<p>Y</p>
<p>Natural ground line dotted</p>	<p>Y</p>
<p>Roof lights / vents, air conditioning units, solar panels or solar hot water</p>	<p>Y</p>

Sections (1:100)	Y
Generally taken through the highest and widest points of the building and should reveal details or facts which are otherwise concealed	Y
Section through stairs (where applicable)	Y
Ceiling / eaves heights and floor levels	Y

Project Specific Information

Note: May be included within drawings, schedules or specifications, including other consultants' documents.

Item applies to Class 10

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Retaining Walls	Y
Dimensioned construction details	Y
Drainage, tanking and protection details	Y
Backfill specifications	Y
Concrete mix, reinforcement placement. Washout requirements	Y
Specifications and installation details of proprietary and other systems	Y

Masonry Construction	Y
Show unreinforced, reinforced or earthwall construction specifications and details	Y
Identify structural and non-structural walls	Y
Reinforcing specified for reinforced walls	Y
Identify fire rating requirements	Y
Masonry unit sizes and bond patterns and tooling of joints	Y
Specification of brick ties and anchorages	Y
Mortar specification	Y
Cavity dimension and clean out specification	Y
Knockout blocks for washout	Y
Control joint location and detail	Y
Specify lintels and bond beams	Y
Weatherproofing and waterproofing details	Y
Flashings, damp proof course and weep holes	Y
Weephole guards (insects, bushfire-prone areas)	Y

Exterior Wall Cladding	Y
Cladding system description, manufacturer, material, pattern and colour, cavity detailing	Y
Fixings, flashings and other details	Y

Exterior Wall Cladding	Y
Sub-floor ventilation	Y

Interior Wall Lining	Y
Specify material and system	Y
Wet areas specification (extent and system e.g. membrane, manufacturer and type)	Y

Flooring	Y
Specify material and system	Y

Item applies to Class 10 :

Wet Areas	
Waterproofing and water resistance requirements for building elements in "Wet Areas" <i>Note: Designs shall indicate wet area locations; provide wet area specifications, location of propriety fixtures (shower trays etc.) or whether an "open wet floor" system is proposed that requires waterproofing or both. The extent of wet areas must be indicated.</i>	

Fire Safety	Y
Smoke and heat alarms, location and type (interconnection where more than one)	
Emergency lighting (for Class 1b)	
Fire separation details	
Bushfire-Prone Area specifications <i>Note: Specifications to include requirements from AS3959. General construction: subfloor supports, floors, walls, external glazing elements and assemblies, external doors and windows, roofs, verandas and attached carport roofs, penetrations, eaves, fascia, gables, gutters and down pipes, verandas, decks, steps, ramps and landings. Water and gas pipe supply.</i>	Y
Alpine area requirements (900m above AHD)	Y

Safe Movement and Access (including stairs and ramps)	Y
Stair design details, balustrade construction and spacing of openings (gaps <125mm) and handrail details	Y
Clearance height above stair nosings	Y
Winders detail	Y
Dimensions of landings, risers and goings, non-slip nosings <i>Note: Sections to indicate acceptable ceiling height between levels (2m minimum)</i>	Y
Method of construction, including aperture size, non-slip requirements	Y
Ramp slope and surface finish	Y
Disability access requirements (for Class 1b)	

Swimming Pools and Pool Spas	
Construction details, waterproofing, drainage, pool water recirculation and filtration systems	
Pool safety barrier details and height	
Gates and latches as part of safety barriers	

Additional Construction Requirements	Y
High wind, earthquake, flood prone, landslide hazards, Bushfire-Prone Areas (others are shown on cover page of example drawings)	Y
Heritage buildings	Y

Glazing	Y
Window and Door systems description (i.e. single or double glazed, tinted or low E glass window and door frame material)	Y
Glazing specification	Y
Opening size for ventilation calculation	Y
Other glazing: <ul style="list-style-type: none"> • Internal glazing specifications including wet area glazing, shower screens, doors • Balustrading system specification (glass and fixings) including height • Overhead glazing, roof or sky lights 	Y
Energy Efficiency details: U Value, Solar Heat Gain Coefficient	Y
Protection of openable windows	Y
<i>Note: The location of certain window openings in buildings require special methods of protection that restricts the opening of a window to prevent a person (especially young children) from falling through the window when open.</i>	

Energy Efficiency	
Also applies to a Class 10 where containing a conditioned space	Y
Building fabric thermal efficiency specification (including climate zone) <ul style="list-style-type: none"> • Walls, ceiling, floors and roof • Insulation location and R-value • Type of Sarking/Wallwrap (Note: consider vapour permeability) 	
Window energy specification (see also under glazing)	
Lighting design plan (see Reflected Ceiling Plan)	
Energy rating documentation	
Building sealing, air movement	
Pipe and services insulation	

<p>Glazing calculator to be supplied if a Deemed-to-Satisfy solution</p> <p><i>Note: Glazing Calculators have been developed by the ABCB to help industry meet the deemed-to-satisfy provisions of The National Construction Code. Once users have entered data into the spread sheet, all calculations are carried out automatically. Calculators can be downloaded from the ABCB website www.abcb.gov.au.</i></p>	
<p>Lighting calculator to be supplied if a Deemed-to-Satisfy solution</p> <p><i>Note: A Lighting Calculator has been developed by the ABCB to help industry meet the deemed-to-satisfy provisions of The Building Code of Australia for maximum lighting power consumption. Once users have entered data into the spread sheet, all calculations are carried out automatically. Calculators can be downloaded from the ABCB web site www.abcb.gov.au.</i></p>	
<p>Under slab or slab edge insulation</p>	

<p>Condensation in Buildings</p>	<p>Y</p>
<p>The building design should provide adequate means of ventilation to the structure to ensure the long term safety of the building.</p> <p>Note: Some considerations may be:</p> <ul style="list-style-type: none"> • Eliminate water vapour generated by occupants, entering roof or wall cavities • Ensure fans are appropriately sized to remove water vapour not just odours. Duct gas appliances, kitchen range hoods, clothes dryers, bathroom exhausts to outside air. • Ensure sufficient makeup air is provided e.g. undercut doors, install vents and open windows more frequently • Provide adequate well-distributed sub-floor ventilation, and use impermeable ground coverings in damp soil areas • Ensure adequate roof ventilation • Introduce ventilated cavities by the use of wall battens spaces and the like for polystyrene, hardboard and cement sheet external wall claddings • Ceiling insulation in preference to roof insulation <p>Note: Insulation should be installed with due consideration of condensation and associated interactions with adjoining building materials. As an example, reflective insulation or sarkings installed on the cold side of the building envelope should be vapour permeable.</p> <p>Note: More information on condensation issues can be found on the ABCB website www.abcb.gov.au.</p>	

Explanatory Information

The above information is the minimum documentation required to obtain a Certificate of Likely Compliance. For guidance on a complete domestic construction project specification, refer to the current NATSPEC Simple Domestic Specification. It is not the intent of this schedule to reduce the standard of Design Specification, but to provide for a mandatory minimum level of documentation.

This Schedule specifies the mandatory minimum level of design details required to be provided by a licensed designer to enable a builder or plumber to undertake the construction of Class 1 and 10 buildings and for a building surveyor to assess the works for compliance with the *Building Act 2016*, National Construction Code and relevant Australian Standards.

The Schedule allows designers the freedom to produce a mixture of graphic designs or specifications or both, provided the design work contains sufficient information and details to comply with the Act.

This Schedule does not diminish the relevant Building Surveyor's right to ask for further design information to be supplied before a certificate of likely compliance can be issued.

Application to Class 10 Buildings and Structures

This Schedule specifically identifies the minimum level of design information required for Class 10 buildings. This is shown by the notation (Y) against particular headings. Designers may only need to provide the required minimum level of documentation for Class 10 buildings where a heading refers to that notation.

Site plans of sheds

Note that the *Occupational Licensing (Building Services Work) Regulations 2016* allows a site plan of a shed (Class 10 or 7b) to be drawn by persons who are not a licensed building services provider.

Documentation Information Requirements

Detailed information provided on drawings or within specifications must be job specific to the proposed project. e.g. structural timber to comply with AS 1684 **should instead be expressed as:** Joists 150x35 MGP10 @ 450mm c/c.

Performance Design Solutions

Documentation should include all calculations, reports, certificates and manufacturer's information together with a written proposition to support a building solution which is not in accordance with the Deemed-to-Satisfy provisions of the National Construction Code (see Part 1.2 BCA Vol. 2).

Duties of Designers

The Building Act 2016

43. Designers

- (1) A person undertaking design work under this Act is to ensure that –
- (a) he or she acts only within the area of his or her competence; and
 - (b) so far as is reasonably practicable –
 - (i) the design of the building work or plumbing work is in accordance with the standards and requirements of this Act; and
 - (ii) the documentation relating to the design includes sufficient information for the assessment of the work in accordance with this Act; and
 - (iii) the documentation relating to the design is sufficiently detailed for a licensed builder or a licensed plumber to perform the work in accordance with the documents and this Act.
- (2) A person must not accept an engagement as a designer in respect of work under this Act if that work requires the person to hold a licence under the *Occupational Licensing Act 2005* and the person does not hold such a licence.